

Remarks

35 USC 112 OA page 2 paras 2 and 3.

This objection is respectfully traversed.

The OA makes is a reference to a "written description requirement"

The OA states that

"The claimed fastening means are not described".

This is puzzling.

Page 11 as amended in the third response, contains a para which is quoted here verbatim;

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"In order to clamp onto the top seams 18 of the cartons 16, a plurality of right clamp bars 74 are secured to right pull rods 66 and 68, by set screws 75. A similar plurality of left clamp bars 76 are secured to left pull rods 70 and 72 by similar set screws 77. The right clamp bars are also provided with respective slide openings 78 for sliding along the left pull bars to which they are not connected. The left clamp bars are provided with respective slide openings 80 for sliding along the right pull bars to which they are not connected."

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The Drawings, Fig 7 as corrected in the third response contain numerals 75 and 77 Copies of the third response showing page 11 and the drawing correction are attached.

The phrase of the Specification , quoted in the OA , as coming from Page 11, seems to be mistaken or incomplete, or is taken out of context.

It is believed that this passage on page 11, and Fig 7, provide a fully adequate basis for claiming the,

fastening means securing said first pair of clamp bars to said second pair of slide rods;

fastening means securing said second pair of clamp bars to said first pair of slide rods;"

The claimed fastening means are the set screws 75 and 77 described and illustrated.

It is hoped that upon review the Examiner will withdraw this objection.

35 USC 103.

The rejection of the claims in the above noted Office Action based on '515 is respectfully traversed.

The OA wording of this rejection uses language which is confusing and inconsistent .

The OA lacks specific reference to components in either the reference '515, or even Applicants own text and drawings.

For example

On page 3 lines 5 and 6 the OA refers to "slide rods 44 and 46" , in '515

On page 3 line 11 the OA refers to "shafts 44,46", in '515

On page 3 line 14 , the OA refers to "slide rods" , in '515, but without a reference.

If these phrases refer to the same components

(actually worm gears 44, 46, to use the correct wording of '515)

then they are confusing.

If these phrases refer to different components in '515 then it would be helpful if the OA could specifically indicate which components, by quoting actual words and actual reference numbers from '515.

Actually of course '515 does not disclose or even mention either "shafts" or "slide rods".

The words shaft and slide rod are nowhere to be found in '515
'515 refers only to "worm gears 44 and 46", col 2 line 65 and 66 .

Similarly, the OA refers to "a first clamp bar 12 " page 3 line 5 and "second clamp bar 20" page 3 line 5, as being found in '515.

The words "clamp bar" are not used in '515 at all.

The reference 12 does not appear on the drawings in '515.

The text, of '515 does refer to a "jaw 12" (not shown in the drawing) but the OA does not use these words.

It is unclear what component of '515 is referenced in the OA as "first clamp bar 12".

Both the words and also the numeral are absent from '515.

The OA at page 3 line 18 is confusing and unclear as to what is referred to as "clamp bars" page 3 line 18.

It is again submitted that the stretched interpretation, in this OA, of '515 is unjustified.

The OA also refers to "bearing openings", in '515, but without a reference number '515 does not use the phrase "bearing opening"

'515 does show a "linear bearing 48", and uses these words in col 3 line 5.

Other than this there is no reference to a "bearing" of any kind.

The OA para 11 suggests that the jaws of '515 are threaded to receive the worm gears 44 and 46. Assuming this is true, then the use, in the OA, of the term "bearing opening" to refer to such threaded openings in '515 is unjustified, and is not "analogous".

A threaded bolt may pass through a female threaded nut. However a nut is not described as having a "bearing opening" through which the bolt slides.

Indeed if a bolt did "slide" through its nut, it would not function as a nut and bolt. It would be useless. There is nothing "analogous" between a bolt and a nut with a thread and a slide bearing, with a slide rod.

OA Para 11 seeks to argue that the language changes are justified to refer to "analogous" parts.

It is submitted with respect that a worm gear is not "analogous" to a slide rod.

A bearing opening through which a slide rod passes, is not "analogous" to a threaded opening.

OA Para 6 page 4

The OA states that

- a. '515 does not disclose a plurality of clamp bars, and
 - b. '515 does not disclose a plurality of first and second slide rod pairs.

This is helpful.

It may also be noted that '515 does not disclose fastening means fastening the slide rods to the clamp bars.

OA Para 7 page 4

The OA states that it have been would be obvious..., etc...to provide for multiple pairs of shafts, presumably referring to the worm gears 44 and 46. .

OA Para 7 does NOT state that it would be obvious to provide a plurality of clamp bars.

OA Para 7 does not state that it would be obvious to provide clamp bars fastened to slide rods.

Claim 10 does claim

a plurality of pairs of clamp bars, and does claim that some are slideable along some slide rods.

Claim 10 does claim fastening means securing clamp bars to slide rods.

ie:

"a first pair of clamp bars slideable along said first pair of said slide rods; a second pair of clamp bars slideable along said second pair of said slide rods, relative to said first pair of clamp bars; "

"fastening means securing said first pair of clamp bars to said second pair of slide rods;

fastening means securing said second pair of clamp bars to said first pair of slide rods;"

The claim wording requires at least four such clamp bars.

'515 does not show this.

The claims are distinguishable.

The claim requires fastening means fastening the clamp bars to slide rods.
'515 does not show this.

Incidentally , in case there is to be a suggestion that '515 could be modified to add more "supports 14 and 22" , on the threaded rods 44 and 46 there will be a problem.

Four supports 14 and 22 each having threaded openings could not be assembled in two pairs, along oppositely threaded worm gears 44 and 46 , for movement towards and away from one another.

This simply mechanically impossible. Something which is impossible cannot be obvious.

OA para 5 lines 11 to 13.

This passage is unclear.

The OA suggests that "shafts" (really worm gears) 44 and 46, are "press fitted to a frame."

The OA does not identify this "frame" , in '515, by number.

'515 does not use the word frame at all.

'515 says nothing about "press fitting."

Applicants text says nothing about "press fitting" either, so there is not any "analogous" use here.

What does this mean?.

A press fit of a worm gear to a fixed member would render the two parts immovable.

The worm gear could not rotate and would be useless.

The OA then suggests that because these worm gears 44 and 46 are "press fitted into this frame ?", that the worm gears are thus "fastened" to the clamp bars.

If so then the entire assembly would be immovable.

If the supports 14 and 22 (clamp bars) are ALL fastened to the worm gears 44, 46, then they cannot at the same time (slide) along them .

If worm gears do rotate, (analogous to sliding in the opinion of the OA), then they are not "fastened" to the supports 14 and 22.

Later in the OA at para 11 the language changes again.

Here the OA refers to "a side of the gripper body 26"

'515 refers only to a "structure 26", col 2 line 42, and line 48 ,and line 64

This "structure" appears from the drawings to be a simple channel.

If the worm gear 44 and 46 are "press fitted" into this channel 26 they will not rotate.

Even if we assume some form of such attachment, what is achieved?

The sides of the channel 26 do not function as clamp bars, slideable on slide rods. They cannot, even using the most far fetched interpretation, be suggested as being the equivalent of Applicants plurality of clamp bars, which are SLIDABLE along some slide rods and are fastened to others.

Clearly it is beyond question that the two sides of the channel 26 in '515, cannot move anywhere.

Applicant clearly and fully discloses, and clearly claims in Claim 10, first and second pairs of slide rods;

pairs of first clamp bars slideable along the first slide bars;

pairs of second clamp bars slideable along the second slide rods;

fastenings securing the first clamp bars to the second slide rods;

fastenings securing the second clamp bars to the first slide rods;

The OA has not found that this would be obvious

The claims therefor define patentable subject matter over '515, using the findings of para 6 and 7 of the OA.

It is again repeated that the Examiner is placing an unreasonable and unconscionable burden upon this Applicant by

- 1 altering terminology of '515, or "analogising" components which are widely different from one another in structure and in function, to suit his own argument,
- 2 suggesting that a worm gear can somehow "slide through a thread" in a bar
3. Arguing that there is some "fastening" between the support members 14 and 22 of '515 , and the channel 26.
4. Arguing that the worm gears 44 and 46 are "press fitted" into the fixed channel 26, which would render them immovable and useless.

10 However Claim 10 is revised by including the subject matter of old claim 11 relating to bearing means. This is to assist in clarifying that the first pair of slide rods are secured to the first pair of clamp bars, which slide on the second rods, and the second pair of slide rods are secured to the second pair of clamp bars, which slide on the first rods.

Claim 11 is cancelled. No new issues are raised by this amendment.

Claim 11 was on file since the filing of the application.

Claim 10 is still unchanged in that it specifically recites fastening means for the first clamp bars (Not shown in '515) and fastening means for the second clamp bars (not shown in '515)

20 The claim also state that the first pair of rods move in one direction and that the second pair of rods move in a direction opposite to the first pair and that the clamp bars slide along the rods to which they are NOT secured.

There is absolutely nothing in '515 or any other patent which suggests any such attachment or any such movement, of pairs of rods in opposite directions.

Under separate cover I am sending a video tape showing the operation of the invention. I hope that this may better enable the examiner to understand the nature of the invention. It may be destroyed after he is finished.

The newly cited references have not been applied to the claims and are believed to be distinguishable for the reasons given.

Reconsideration and allowance is earnestly solicited in view of the foregoing. In the

event that the Examiner feels that a discussion of the case would be helpful it is respectfully requested that he call the undersigned at the telephone number noted. This response has been filed by FAX, on February 16th 2004, within the two month deadline from December 18 2003.

Yours respectfully,

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CLAIMS LIST

Claims 1 to 9 cancelled

10. (Currently amended) Carton gripper apparatus for gripping groups of cartons for packing said groups into boxes, and comprising:

a gripper body member;

a first and a second pair of slide rods supported on said gripper body member;

a first pair of clamp bars slideable along said first pair of said slide rods;

a second pair of clamp bars slideable along said second pair of said slide rods, relative to said first pair of clamp bars;

bearing openings in said clamp bars, and wherein said slide rods extend through respective said bearing openings thereby to permit said sliding of said clamp bars along respective said pairs of said slide rods;

fastening means securing said first pair of clamp bars to said second pair of slide rods;

fastening means securing said second pair of clamp bars to said first pair of slide rods;

and,

means for moving said first pair of slide rods in one direction while simultaneously moving said second pair of slide rods in the opposite direction to said first pair of slide rods, thereby sliding said first pair of clamp bars along said first pair of slide rods, and sliding said second pair of clamp bars along said second pair of slide rods, and thereby moving said first and second pairs of clamp bars towards one

another into a gripping position and away from one another into a releasing position.

11. (Cancelled)

12. (Currently amended) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 10 14 and wherein said first pair of clamp bars are secured by screw means to said second pair of said slide rods, and wherein second pair of said clamp bars are secured to said first pair of said slide rods by screw means said screw means thereby preventing sliding of respective said pairs of clamp bars relative to respective said slide bars to which they are secured.

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13. (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 12 and wherein each of said first pair of slide rods are moveable to move said second pair of clamp bars, and wherein each of said second pair of slide rods are moveable to move said first pair of clamp bars.

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14. (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 13 and including a head plate, and two side walls depending downwardly therefrom, slide openings in said side walls for receiving said first and second pairs of slide rods therethrough, and power means supported by said head plate and operatively connected to respective first and second pairs of clamp bars.

15. (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 14 and including rods extending from said power means, and being connected to said first and second pairs of clamp bars, and being operable to move said first and said second pairs simultaneously towards or away from one another.

Claims 16 to 20 cancelled.

10 Claim 21 (Currently amended) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 10 11 and wherein said first pair of clamp bars comprises an end clamp bar and an intermediate clamp bar, wherein said end clamp bar in said first pair is secured to said second pair of said slide rods, and wherein said second pair of said clamp bars comprises an end clamp bar and an intermediate clamp bar wherein said end clamp bar in said second pair is secured to said first pair of said slide rods.

20 Claim 22 (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 21 and including first and second frame plates connected to respective said intermediate clamp bars in respective first and second pairs.

Claim 23 (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 22 and including rods extending from said power means, and being connected to said first and second frame plates and being operable to procure relative movement of said first and said second pairs of clamp bars simultaneously towards or away from one another.

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Claim 24 (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 21 and including third and fourth pairs of said clamp bars.

Claim 25 (Previously presented) Carton gripper apparatus for gripping groups of cartons for packing as claimed in claim 21 and including fastening devices extending between said first clamp bars and said second pair of slide rods, and fastening devices extending between said second clamp bars and said first pair of slide rods.

In The Specification;

Page 11, Replace paragraph starting at

In order to...

and ending at

...are not connected.

with the following new paragraph;

In order to clamp onto the top seams 18 of the cartons 16, a plurality of right clamp bars 74 are secured to right pull rods 66 and 68, by set screws 75. A similar plurality of left clamp bars 76 are secured to left pull rods 70 and 72 by similar set screws 77. The right clamp bars are also provided with respective slide openings 78 for sliding along the left pull bars to which they are not connected. The left clamp bars are provided with respective slide openings 80 for sliding along the right pull bars to which they are not connected.

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In the Drawings , amend Fig 6 by adding numerals 75 and 77 as shown in the attached print.